imparting biaxial strain on said thin film by changing said first ring between said second inner perimeter and said first inner perimeter in response to changing temperature of said first ring;

changing said second ring between said first outer perimeter and a second outer perimeter that corresponds to said first perimeter of said first ring and in response to changing said first ring between said second inner perimeter and said first inner perimeter;

changing the temperature of said second ring;

changing said second ring between said second outer perimeter and said first outer perimeter in response to changing the temperature of said first ring;

changing biaxial strain to said thin film by changing said first ring between said first inner perimeter and said second inner perimeter in response to the change of said second ring between said second outer perimeter and said first outer perimeter.

49. A method for reversibly changing the inner perimeter of a ring device, comprising:

providing a first ring of shape memory alloy having a first inner perimeter;

reversibly changing said first inner perimeter of said ring to a second inner perimeter;

providing a second ring of shape memory alloy having a first outer perimeter;

aligning said first outer perimeter of said second ring corresponding to said second inner perimeter of said first ring;

coupling said second ring to said first ring;

changing the temperature of said first ring;

changing said first ring between said second inner perimeter and said first inner perimeter in response to changing the temperature of said first ring;

changing said second ring from said first outer perimeter to a second outer perimeter that corresponds to said first perimeter of said first ring and in response to changing said first ring between said second inner perimeter and said first inner perimeter;

changing the temperature of said second ring;

changing said second ring between said second outer perimeter and said first outer perimeter in response to changing the temperature of said first ring;

changing said first ring between said first inner perimeter and said second inner perimeter in response to changing said second ring between said second outer perimeter and said first outer perimeter.

50. A method for reversibly changing the outer perimeter of a tube of shape memory alloy, comprising;

providing a die having a tapered bore, a press pin adapted to extrude said tube through said bore, and a press;

positioning said cylindrical tube in said tapered bore; and

reversibly changing the outer perimeter of said tube by extruding said tube through said tapered bore with pressure from said press on said press pin.

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